UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,140	09/06/2000	Daisuke Shinohara	500.38991X00	9175

20457   7590   03/14/2005

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EXAMINER
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ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,7,8,11,14,16 and 17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7,8,11,14,16 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the Request for Continued Examination (RCE) filed on

November 10, 2004. Claims 2, 4-6, 9, 10, 12, 13 and 15 have been cancelled. Claims 1, 7, 8, 11,

14, 16 and 17 remain pending and are again presented for examination. A formal action on the

merits of claims 1, 7, 8, 11, 14, 16 and 17 follows.

2.   Claims 12, 13 and 15-17 were objected to; however, the rejection is obviated through the

canceling of claims 12, 13 and 15 and corrections to claims 16 and 17.

Response to Arguments

3.   Applicant's arguments with respect to claim 1 have been considered but are moot in view

of the new ground(s) of rejection.

4.   Applicant's arguments filed 11/10/2004 have been fully considered but they are not

persuasive.

> (A) Applicant contends that Okada does not disclose acquiring identification information
>
> used to obtain a maintenance program, sending a request to obtain a pseudo
>
> maintenance program and checking the presence or not of a reply to the request,
>
> whereas claim 7 calls for this limitation.

In response to argument A, Examiner asserts that Okada does in fact teach acquiring

identification information used to obtain a maintenance program, sending a request to obtain a

pseudo maintenance program and checking the presence or not of a reply to the request. In

Okada Col. 10 lines 44-47, a request is received which contains a pseudo program name by a

requestor, thereby implying the requestor has already obtained the identification of the program,

i.e. the pseudo program name. Once the request has been sent, a response is transmitted to the

host, i.e. requestor, which constitutes a reply. See Okada Col. 10 lines 66-67 – Col. 11 lines 1-4

and lines 29-36. During patent examination and prosecution, claims must be given their broadest

reasonable interpretation. *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed.

Cir. 1993); *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969). Giving the

instant claims their broadest reasonable interpretation, "requesting a pseudo program using

identification information and checking for a reply" is broad enough to read on the requests by

the host for a pseudo program name and waiting for a reply of Okada. Therefore, Examiner

demurs to this assertion based upon the above rationale and rejection below.

(B) Applicant contends that Moritomo does not disclose or suggest previously

registering identification information of an information processing apparatus

subjected to maintenance into the management subsystem, receiving input of

identification information for specifying the information processing apparatus prior

to the instruction to set said boot device and judging whether the received

identification information is included in the registered identification information,

whereas, claim 8 calls for this limitation.

In response to argument (B), the Examiner respectfully disagrees and asserts that

Moritomo does in fact teach all of the claimed limitations. Moritomo inherently teaches

previously registering identification information because he performs a check to see if the IP

address has already been registered in the table upon receiving input of identification information

for specifying said device sent via the maintenance data request. See Col. 5 lines 11-23 and Col.

8 lines 26-35. Thus, Moritomo sends a request to perform maintenance on a device by

identifying the device and a table is consulted to determine if the device is previously registered.

Furthermore, Moritomo, in order to determine if device exists/registration exists, the table is

consulted and the information in the request is compared to the information stored in the table,

thus judging whether the stored information matches the request. See Col. 9 lines 7-31. Thus,

Moritomo does in fact teach all of the limitations set forth in claim 8 and thus, examiner demurs

to the applicant's contention.

(C) Applicant contends that Craig fails to explicitly teach downloading the boot image

which contains executable code and executing that code to update the firmware.

In response to argument (C), the Examiner respectfully asserts that Craig unequivocally

teaches these arguments, even though the arguments are not even claimed by the applicant.

Craig explicitly teaches these limitations in Col. 6 lines 4-11. It is unclear what position the

applicant takes to argue such a disclosed and evident point. Therefore, argument is moot.

      (D) Applicant contends that Ote fails to teach a first and a second power supply in

             addition to failing to teach turning "on" the second power supply after a lapse of a

             predetermined time since the second power supply has been turned "off", whereas,

             claims 11 and 4 recite this limitation.

In response to argument (D), the examiner respectfully disagrees and asserts that Ote

does teach two power supplies for the managed computer, namely a power unit housing a sub-

power station along with a separate power controller, i.e. supply, supplying power to the various

controllers and components of the system. This is clearly shown in figures 1A and 5A. With

regards to not teaching turning "on" the supply after a lapse of a predetermined time since

turning the power "off", again, the examiner respectfully disagrees. The rejection below

attempts to clarify this matter by citing additional support within the reference to support the

Examiner's position. In summary, the power supply is turned "on" after a predetermined, i.e.

timer value, length of time. This timer can only be in relation to the supply "off" as the power

can not be turned "on" if it is not "off" and already "on". The claims, additionally, fail to recite

the power on and power off are mutually exclusive and therefore this part of the argument is not

being considered. During patent examination and prosecution, claims must be given their

broadest reasonable interpretation. *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057,

1059 (Fed. Cir. 1993); *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969).

Giving the instant claims their broadest reasonable interpretation, "turning "on" the second

power supply according to a second request from the server after a lapse of a predetermined time

since the second power supply of the device has been turned "off"" is broad enough to read on

the timer based control of a second power supply unit of Ote.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 1, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Crisan (U.S. 6,292,890) in view of Craig et al. (U.S. 6,266,809) and Ote et al. (U.S. 5,815,652).

Regarding claim 1, Crisan teaches a firmware updating method comprising the steps of:

setting said communications device as a boot device according to an instruction from said

remote management server **[Crisan -- Col. 6 lines 10-13, lines 25-31 and lines 65-67 and Col.**

7 lines 1-4 – Network server sends "wake-up" packet to network computer which alters the

boot order to boot from the network and obtain master copy of operating system for

maintenance. CPU alters boot sequence to boot from network, i.e. communication device];

resetting said information processing apparatus in system reset according to a system

reset instruction from said remote management server under an environment of an operating

system of said information processing apparatus operating **[Crisan -- Col. 6 lines 39-52 and**

lines 65-67 – Network server sends "wake-up" packet which causes system to reboot, i.e.

reset];

booting said information processing apparatus by said communications device **[Crisan --**

Col. 6 lines 25-35 – Maintenance program is loaded onto network computer by network

server on boot]; and

setting said storage as a boot device **[Crisan -- Col. 5 lines 48-54 and Col. 7 lines 4-7 –**

After any updating or maintenance activities are completed, original boot order is followed

which causes computer to boot from local storage device, i.e. hard disk].

Crisan fails to explicitly teach updating firmware, sending a notice of execution completion of

updating said firmware to said remote management server, receiving a first request from said

remote management server, controlling "off" said second power supply in said power controller

in response to the first request, receiving a second request from said management server after a

predetermined period since first request, controlling "on" said second power supply in said

power controller in response to the second request and reading and executing said firmware

updated in said storage of said information processing apparatus.

Craig, however, discloses a firmware updating method **[Craig -- Col. 3 lines 26-28]**, which

employs a server to update the firmware of a network computer **[Craig -- Col. 6 lines 4-11 and**

Col. 7 lines 20-22 and lines 43-44 – Server is responsible for controlling the updating of the

firmware], sending a notice of execution completion once updating of firmware is complete to

server [Craig -- Col. 6 lines 47-51, lines 54-56 and lines 63-67 and Col. 7 lines 43-48 –

Network computer notified management server that update was successful, i.e. notice of

execution completion] and to read and execute the updated firmware in said storage [**Craig --**

Col. 5 lines 34-37 and Col. 7 lines 58-66 – After downloading updated firmware to the

network computer, network computer is rebooted and newly updated firmware stored in

local storage area, i.e. memory, is executed].

Furthermore, Ote discloses receiving a first request from said remote server causing the power

supply to be turned "off" and receiving a second request after a predetermined period since

·receiving the first request from said remote server causing the power supply to be turned "on"

[**Ote -- Col. 8 lines 5-48 – Power off request is sent to power controller to turn "off" the**

supply from the first message. Through the use of preset time power-on, after a

predetermined amount of time (after having already turned the power "off"), a second

command/message is sent causing the power controller to turn "on" and supply power to

device].

It would have been obvious to one of ordinary skill in the art at the time the invention was made

to incorporate the updating of firmware of firmware by a server, reading and executing of

updated firmware in local storage and sending a notice of completing said updating of said

firmware as taught by Craig, along with receiving a first request from said remote server causing

the power supply to be turned "off" and receiving a second request after a predetermined period

since receiving the first request from said remote server causing the power supply to be turned

"on", as taught by Ote into the maintenance software of Crisan in order to achieve the benefit of

performing a routine type of maintenance activity, i.e. updating firmware, remotely on network

computers which reduces the management requirements on the network and alleviates

unnecessary labor of having to travel to a site to update a computer in addition to providing a

more stable power supply to the computer while at the same time providing greater control over

the system for the remote manager.

Regarding claim 11, Crisan teaches an information processing apparatus comprising:

a communications device which is to be connected with a server **[Crisan -- Figure 2 and
Col. 6 lines 8-10]**;

a setting component setting one of said communications device and said storage as a boot

device in response to a request from said server **[Crisan -- Col. 6 lines 10-13, lines 25-31 and

lines 65-67 and Col. 7 lines 1-4 – Network server sends "wake-up" packet to network

computer which alters the boot order to boot from the network and obtain master copy of

operating system for maintenance. CPU alters boot sequence to boot from network, i.e.

communication device]**;

a system reset component for resetting said information processing apparatus in system

reset according to a request from aid remote management server under an environment of an

operating system of said information processing apparatus **[Crisan -- Col. 6 lines 39-52 and

lines 65-67 – Network server sends "wake-up" packet which causes system to reboot, i.e.

reset]**; and

information processing apparatus sets said storage as a boot device **[Crisan -- Col. 5

lines 48-54 and Col. 7 lines 4-7 – After any updating or maintenance activities are**

completed, original boot order is followed which causes computer to boot from local storage device, i.e. hard disk].

Crisan fails to disclose a storage device for storing firmware, sending a notice of execution completion after updating said firmware to said remote management server, a power controller controlled by a first power supply separate from a second power supply, receiving a first request from said remote management server, controlling "off" said second power supply in said power controller in response to the first request, receiving a second request from said management server after a predetermined period since first request, controlling "on" said second power supply in said power controller in response to the second request and obtaining a program from a server after resetting apparatus to control firmware and storing the updated firmware

Craig, however, teaches a storage device for storing therein a firmware **[Craig -- Col. 5 lines 34-37 – Flash ROM stores firmware for network computer]**, wherein said communications device obtains a program from said server after resetting said information processing apparatus and wherein said information processing apparatus updates said firmware by use of said program **[Craig -- Col. 6 lines 4-11 and Col. 7 lines 20-22 and lines 43-44 – Network computers downloads boot image which contains executable code to obtain updated firmware]**, storing said firmware updated by said information processing apparatus in said storage **[Craig -- Col. 5 lines 34-37 – Flash ROM stores firmware]** and sending a notice of execution completion once updating of firmware is complete to server **[Craig -- Col. 6 lines 47-51, lines 54-56 and lines 63-67 and Col. 7 lines 43-48 – Network computer notified management server that update was successful, i.e. notice of execution completion].**

In addition, Ote discloses the use of multiple power supplies in an information processing apparatus, a power controller controlled by a first power supply separate from a second supply **[Ote -- Figure 1A and 5A and Col. 6 lines 21-41 and Col. 8 lines 5-18]** along with receiving a first request from said remote server causing the power supply to be turned "off" and receiving a second request after a predetermined period since receiving the first request from said remote server causing the power supply to be turned "on" **[Ote -- Col. 8 lines 5-48 – Power off request is sent to power controller to turn "off" the supply from the first message. Through the use of preset time power-on, after a predetermined amount of time (after having already turned the power "off"), a second command/message is sent causing the power controller to turn "on" and supply power to device]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a power controller and separate power supplies along with receiving a first request from said remote server causing the power supply to be turned "off" and receiving a second request after a predetermined period since receiving the first request from said remote server causing the power supply to be turned "on", as taught by Ote, along with a storage device for storing firmware, obtaining a program for a server for updating the firmware and sending a notice of completing said updating of said firmware, as taught by Craig, into the invention of Crisan in order to achieve the benefit of performing a routine type of maintenance activity, i.e. updating firmware, remotely on network computers which reduces the management requirements on the network and alleviates unnecessary labor of having to travel to a site to update a computer in addition to providing a more stable power supply to the computer while at the same time providing greater control for a remote manager.

Regarding claim 14, this is a system claim corresponding substantially to the apparatus

claimed in claim 11. It has similar limitations; therefore, claim 14 is rejected under the same

rationale.

7.   Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisan

(U.S. 6,292,890), Craig et al. (U.S. 6,266,809) and Ote et al. (U.S. 5,815,652), as applied to

claims 1 and 14 above respectively, in view of Okada (U.S. 6,088,738).

Regarding claim 7, Crisan-Craig teach the invention substantially as claimed, as

aforementioned in claim 1 above, but fail to explicitly teach acquiring identification information

used to obtain a program, sending a request to obtain a pseudo program by said information and

checking the presence or not of a reply to the request.

Okada, however, teaches acquiring and sending a request to obtain a pseudo program by said

identification information **[Okada -- Col. 4 lines 47-49 and Col. 10 lines 38-47 – Request is**

sent using identification information, i.e. pseudo program name]; and checking the presence

or not of a reply to the request to obtain the pseudo program **[Okada – Col. 10 lines 66-67 –**

Col. 11 lines 1-4 and lines 29-36 – Host waits for transmission of response, i.e. reply. This

can come in the form of an error or a program name in return].

It would have been obvious to one of ordinary skill in the art at the time the invention was made

to include sending pseudo program name requests out on the network by a network computer as

taught by Okada into the invention of Crisan-Craig in order to ensure that no other computers are

acting as servers and transmitting unauthorized programs to machines which further enhances the

security of the system.

Regarding claim 16, this is a system claim corresponding to the method claimed in claim

7 above. It has similar limitations; therefore, claim 16 is rejected under the same rationale.

8.   Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisan

(U.S. 6,292,890), Craig et al. (U.S. 6,266,809) and Ote et al. (U.S. 5,815,652), as applied to

claims 1 and 14 above respectively, in view of Moritomo (U.S. 5,724,511).

Regarding claim 8, Crisan-Craig teach the invention substantially as claimed, as

aforementioned in claim 1 above, but fail to explicitly teach previously registering identification

information of a computer subjected to maintenance into a server, receiving the input of

identification information prior to setting boot device and judging whether the received

identification information is included in the registered identification information.

Moritomo, however, teaches a remote maintenance control system which previously has

registered devices for control by maintenance control system and upon request specifying device,

checks to ensure the device is registered with the maintenance facility [**Moritomo -- Figures 5 and 7, Col. 4 lines 46-50, Col. 5 lines 11-23, Col. 8 lines 26-49 and Col. 9 lines 7-31**].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the registering and checking of identification information corresponding to network computers by the remote maintenance control system as taught by Moritomo into the invention of Crisan-Craig in order to ensure that only proper computers registered under a given server are maintained by that server.

Regarding claim 17, this is a system claim corresponding to the method claimed in claim 8 above. It has similar limitations; therefore, claim 17 is rejected under the same rationale.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ewing et al. (U.S. 6,711,613) discloses a remote power control system for controlling power "on" and "off" of a plurality of devices remotely via a manager. Please note, this reference substantially teaches similar information which pertain to claims 1, 11 and 14 and can be used in place of/in combination with Ote et al.
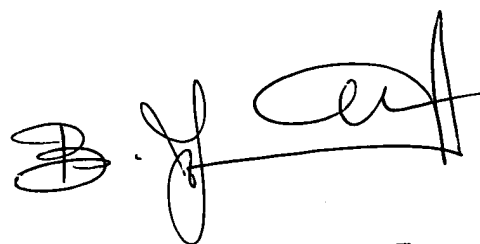
Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thomas J. Mauro Jr. whose telephone number is 571-272-3917.

The examiner can normally be reached on M-F 8:00a.m. - 4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJM
March 4, 2005

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER